

WBS No: 1HAF10
Activity ID: 1HAF100010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter *

Starts In FY *

WBS No: 1HAF10	Title: Nuclear Safety & Licensing											
Activity ID: 1HAF100010	Description: Nuclear Safety & Licensing Administration FY04	Cost Risk 1 Schedule Risk 1										
Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF1010	Program Administration	1.00	each	EE	1.850	1.850	98.883	0	0	98.883	27.885	126.767
LF1012	NS&L Supplies	1.00	each	EE	0	0	0	6.257	0	6.257	0	6.257
LF1013	NS&L Travel	1.00	each	EE	0	0	0	3.271	0	3.271	0	3.271
LF1014	NS Database Maintenance	1.00	each	EE	0	0	0	52.391	0	52.391	0	52.391
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	26.891	26.891	0	26.891
Total for Activity 1HAF100010:						1.850	98.883	61.919	26.891	187.693	27.885	215.577

Line Item LF1010 - Program Administration

BOE	Estimators Experience - Prior year budget preparation, actuals and out-year organizational structures were utilized to develop this estimate Experience Item Desc - Nuclear Safety & Licensing program manager and secretarial support Breakdown of Cost Data: Item - Program Administration Units - Program Manager Unit Cost - 1,850 hours per FY											
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	K249S Nuclear Safety & Licensing	Linear	1.850.00	Hours
Factors	1850 hours					

Line Item LF1012 - NS&L Supplies

BOE	Estimators Experience - Administration of the Nuclear Safety program for the past 3 years Experience Item Desc - Office Supplies/Program Requirements Breakdown of Cost Data: Item - Office supplies per person per P&I requirements Units - 5 FTEs in FY04 Unit Cost - \$250 per person in Office Supplies = \$1,250 Item - Additional Engineering Supplies Units - 1 year of supplies Unit Cost - \$5,007 Itemized Description 1 Memory Upgrade = \$130 1 Computer Replacement x \$2,884 computer & \$395 monitor = \$3,279 2 Software Purchases x \$398 = \$796 40 Reams of Paper for the Fax Machine/Color Printer x \$10 = \$400 Toner/Developer for Fax Machine = \$100 2 lots of Recycle Boxes (1 lot = 50 boxes) x \$36 = \$72 2 Color Printer Toner x \$115 (\$70 for Black; \$45 for Color) = \$230											
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5C SUPPLIES	0000 NONE	K249S Nuclear Safety & Licensing	Front Loaded	5.007.00	Dollars
Factors	5007 Miscellaneous Supplies					
	A5C SUPPLIES	0000 NONE	K249S Nuclear Safety & Licensing	Front Loaded	1.250.00	Dollars
Factors	250 dollars per person 5 direct employees					

Line Item LF1013 - NS&L Travel

BOE	Estimators Experience - This estimate is based upon requested and approved travel in FY00. Experience Item Desc - This line item funds travel for the Nuclear Safety & Licensing organization. Breakdown of Cost Data: Item - Nuclear Safety & Licensing's Organizational Travel Units - 2 trips/1 requiring registration fees for 3 years Unit Costs - estimated at \$1,223 travel costs and \$825 for registration fees Itemized Travel Cost Estimate: Duration is 3 working days Airfare - 7 day advance notice \$600;											
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WBS No: 1HAF10
Activity ID: 1HAF100010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
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Car Rental - \$38/day x 4 = \$152;
PerDiem for Atlanta - \$38/day meals x 4 = \$152;
Hotel for Atlanta - \$93/night x 3 nights = \$279
DIA Airport Parking - 4 days X \$10 = \$40
TOTAL Cost: \$1,223

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K249S	Nuclear Safety & Licensing	Front Loaded	825.00	Dollars
Factors	1	Trip	825	Average Fees per Trip				
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K249S	Nuclear Safety & Licensing	Front Loaded	2.446.00	Dollars
Factors	2	Trips	1223	Average Travel Expenses per Trip				

Line Item LF1014 - NS Database Maintenance

BOE

Estimators Experience - Prior year budget preparation, actuals and out-year organizational structures were utilized to develop this estimate
Experience Item Desc - Nuclear Safety & Licensing Database maintenance and office support.
Breakdown of Cost Data:
Item - Subcontracted Support for Database maintenance
Units - 1850 hours per year
Unit Cost - \$35 per hour

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	K249S	Nuclear Safety & Licensing	Linear	52.391.44	Dollars
Factors	1850	hours per year	35	dollars per hour				

0.80913 [SYS 061400] .80704 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	8.773.59	Dollars
Factors	8773.6	Dollars						
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	18.117.00	Dollars
Factors	18117	Dollars						

Activity ID: 1HAF100011 Description: Nuclear Safety & Licensing Administration FY05

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF1051	NS&L Program Administration	1.00	each	EE	1,850	1,850	98,883	92,360	0	191,242	34,411	225,654
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	120,406	120,406	0	120,406
Total for Activity 1HAF100011:						1,850	98,883	92,360	120,406	311,649	34,411	346,060

Line Item LF1051 - NS&L Program Administration

BOE

Estimators Experience - Prior year budget preparation, actuals and out-year organizational structures were utilized to develop this estimate. The work plan is based upon the Nuclear Safety & Licensing Manager's best guess based upon the current Closure Contract plan for the need of resources for emergent critical issues through-out a fiscal year.

Experience Item Desc - Nuclear Safety & Licensing program manager and office supplies. This activity also covers the requested or required assessments from the DNFSB through DOE/RFPO direction and resolution of other issues which may arise while the site is completing site closure.

Breakdown of Cost Data:
Item - Program Administration
Units - Program Manager and Secretarial Support
Unit Cost - 1,850 hours per FY per person

Item - Office supplies per person per P&I requirements
Units - 3.5 FTEs in FY05
Unit Cost - \$250 per person in Office Supplies

Item - Additional Supplies
Unit Cost - approximate cost \$1,535

WBS No: 1HAF10
Activity ID: 1HAF100011

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
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Activity Filter *

Starts In FY *

Additional Supplies Itemized -
Memory Upgrade = \$130
2 Software Purchase x \$398 = \$796
25 Reams of Paper for the Fax Machine/Color Printer x \$10 = \$250
Toner/Developer for Fax Machine = \$100
4 lots of Recycle Boxes (1 lot = 50 boxes) x \$36 = \$144
Color Printer Toner x \$115 (\$70 for Black; \$45 for Color) = \$115

Item - Subcontracted Support for Database maintenance
Units - 925 hours for 1/2 FTE
Unit Cost - \$33.9 per hour (SMI rates)

Item - Nuclear Safety and Safety Experts*
Units - 1/3 of a Professional Level 10 subcontractor
Unit Cost - @ \$99.35 per hour based upon the contract rates with E2

* Assumes that NS expert support will be paid for by the facilities when appropriate (at least 20% of time)

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K249S	Nuclear Safety & Licensing	Linear	1.850.00	Hours
Factors 1850 hours								
A53	E-2	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	64.577.50	Dollars
Factors 650 hours 99.35 dollars per hour								
A5C	SUPPLIES	0000	NONE	K249S	Nuclear Safety & Licensing	Linear	875.00	Dollars
Factors 3.5 FTEs 250 Dollars per person for Supplies								
A5C	SUPPLIES	0000	NONE	K249S	Nuclear Safety & Licensing	Linear	1.535.00	Dollars
Factors 1535 Miscellaneous Supplies								
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	K249S	Nuclear Safety & Licensing	Linear	25.372.43	Dollars
Factors 925 hours for 1/2 FTE 33.9 dollars per hour for Database								

0.80913 [SYS 061400] .80704 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	85.449.00	Dollars
Factors 85449 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	34.957.23	Dollars
Factors 34957.2 Dollars								

Activity ID: 1HAF100012

Description: Nuclear Safety/Licensing Administration FY01-03

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF1010	Program Administration	1.00	each	EE	11.100	11.100	396.714	0	0	396.714	155.463	552.177
LF1012	NS&L Supplies	1.00	each	EE	0	0	0	33.339	0	33.339	0	33.339
LF1013	NS&L Travel	1.00	each	EE	0	0	0	32.652	0	32.652	0	32.652
LF1014	NS Database Maintenance	1.00	each	EE	0	0	0	157.174	0	157.174	0	157.174
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	112.561	112.561	0	112.561
Total for Activity 1HAF100012:						11.100	396.714	223.165	112.561	732.441	155.463	887.903

Line Item LF1010 - Program Administration

BOE

Estimators Experience - Prior year budget preparation, actuals and out-year organizational structures were utilized to develop this estimate
Experience Item Desc - Nuclear Safety & Licensing program manager and secretarial support
Breakdown of Cost Data:
Item - Program Administration
Units - Program Manager and Secretarial Support
Unit Cost - 1,850 hours per FY per person

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
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Activity ID: 1HAF100012

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1HAF
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Starts In FY *

750	STRAIGHT TIME BASE	G040	SECRETARIES	K249S	Nuclear Safety & Licensing	Linear	5,550.00	Hours
Factors	1850	Hours	3	years				
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K249S	Nuclear Safety & Licensing	Linear	5,550.00	Hours
Factors	1850	hours	3	years				

Line Item LF1012 - NS&L Supplies

BOE

Estimators Experience - Administration of the Nuclear Safety program for the past 3 years
Experience Item Desc - Office Supplies/Program Requirements
Breakdown of Cost Data:
Item - Office supplies per person per P&I requirements
Units - 21 FTEs in FY01; 20 FTE in FY02; 16 FTEs in FY03 = 57 FTEs
Unit Cost - \$250 per person in Office Supplies = \$14,250

Item - Additional Engineering Supplies
Units - 3 years of supplies
Unit Cost - \$6,363 x 3 years = \$19,089

Itemized Description
3 Memory Upgrades x \$130 = \$390
1 Computer Replacement x \$2,884 computer & \$395 monitor = \$3,279
4 Software Purchases x \$398 = \$1,592
70 Reams of Paper for the Fax Machine/Color Printer x \$10 = \$700
Toner/Developer for Fax Machine = \$100
2 lots of Recycle Boxes (1 lot = 50 boxes) x \$36 = \$72
2 Color Printer Toner x \$115 (\$70 for Black; \$45 for Color) = \$230

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A5C	SUPPLIES	0000	NONE	K249S	Nuclear Safety & Licensing	Front Loaded	19.089.00	Dollars
Factors	6363	Miscellaneous Supplies	3	years				
A5C	SUPPLIES	0000	NONE	K249S	Nuclear Safety & Licensing	Front Loaded	14.250.00	Dollars
Factors	250	dollars per person	57	direct employees				

Line Item LF1013 - NS&L Travel

BOE

Estimators Experience - This estimate is based upon requested and approved travel in FY00.
Experience Item Desc - This line item funds travel for the Nuclear Safety & Licensing organization.
Breakdown of Cost Data:
Item - Nuclear Safety & Licensing's Organizational Travel
Units - 8 trips/4 requiring registration fees for 3 years
Unit Costs - estimated at \$1,223 travel costs and \$825 for registration fees

Itemized Travel Cost Estimate: Duration is 3 working days
Airfare - 7 day advance notice \$600;
Car Rental - \$38/day x 4 = \$152;
PerDiem for Atlanta - \$38/day meals x 4 = \$152;
Hotel for Atlanta - \$93/night x 3 nights = \$279
DIA Airport Parking - 4 days X \$10 = \$40
TOTAL Cost: \$1,223

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K249S	Nuclear Safety & Licensing	Front Loaded	3.300.00	Dollars
Factors	4	Trips	825	Average Fees per Trip				
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K249S	Nuclear Safety & Licensing	Front Loaded	29.352.00	Dollars
Factors	8	Trips	3	Years	1223	Average Travel Expenses per Trip		

Line Item LF1014 - NS Database Maintenance

BOE

Estimators Experience - Prior year budget preparation, actuals and out-year organizational structures were utilized to develop this estimate
Experience Item Desc - Nuclear Safety & Licensing Database maintenance and office support.
Breakdown of Cost Data:
Item - Subcontracted Support for Database maintenance
Units - 1850 hours per year
Unit Cost - \$35 per hour

WBS No: 1HAF10
Activity ID: 1HAF100012

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	K249S	Nuclear Safety & Licensing	Linear	157.174.30	Dollars
	Factors	1850 hours per year	3	years	35	dollars per hour			

0.80913 ISYS 0614001 .80704 - Svsstem

Line Item SYS - Contingency And Escalation

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	76.036.69	Dollars
	Factors	76036.7 Dollars							
	Cost Element		Skill		Department		Curve	Quantity	Units
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	36.524.52	Dollars
	Factors	36524.5 Dollars							

Activity ID: 1HAF100015 Description: Nuclear Safety Administration

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF1015	Nuclear Safety Administration	1.00	each	EE	0	0	0	323.330	0	323.330	0	323.330
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	31.444	31.444	0	31.444
Total for Activity 1HAF100015:						0	0	323.330	31.444	354.774	0	354.774

Line Item LF1015 - Nuclear Safety Administration

BOE	Estimators Experience - This estimate is based upon the resources required (1 manager) to manage and coordinate the Nuclear Safety Program Experience Item Desc - Manage, supervise, coordinate, oversee the Nuclear Safety program Breakdown of Cost Data: Item - Nuclear Safety Program Manager Units - 1 FTE (SMI) Unit Cost - 1850 hours @ \$108 per hour (based upon SMI's FY00 rate of \$107.50) This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.											
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	M030	MANAGEMENT INTEGRATORS (GR	K249S	Nuclear Safety & Licensing	Linear	323.330.00	Dollars
	Factors	1850 hours	2	years	108	dollars per hour for a Program			

0.80913 ISYS 0614001 .80704 - Svsstem

Line Item SYS - Contingency And Escalation

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	20.489.30	Dollars
	Factors	20489.3 Dollars							
	Cost Element		Skill		Department		Curve	Quantity	Units
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	10.954.29	Dollars
	Factors	10954.3 Dollars							

Activity ID: 1HAF100020 Description: Maintain NS Procedures FY01-02

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF10201	Nuclear Safety Manuals	1.00	each	EE	0	0	0	172.942	0	172.942	0	172.942
LF10202	Nuclear Safety Procedures	1.00	each	EE	0	0	0	172.142	0	172.142	0	172.142
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	33.595	33.595	0	33.595
Total for Activity 1HAF100020:						0	0	345.084	33.595	378.679	0	378.679

Line Item LF10201 - Nuclear Safety Manuals

BOE	Estimators Experience - This estimate is based upon similar work scope in FY00 Experience Item Desc - This item anticipates two revisions to the NSM which will include the preparation of guidance documents and/or implementation plans. Breakdown of Cost Data: Item - Safety Manual revisions Units - Nuclear Engineer Unit Cost - half FTE @ \$92.00 per hour (Tenera's FY00 rate for Professional Level 9)											
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WBS No: 1HAF10
Activity ID: 1HAF100020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
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Activity Filter * Starts In FY *

Item - Safety Manual revisions
Units - Document control support
Unit Cost - 4 hours per revision @ an estimated \$50.00 per hour

Item - Safety Manual revisions
Units - Review and Concurrence from other organizations
Unit Cost - 8 hours per revision @ an estimated \$75.00 per hour

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A52	TENERA	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	170.200.00	Dollars
Factors	925	hours (half FTE)	92	dollars per hour	2	years		
A55	SOURCE ONE	P170	OTHER ADMINISTRATIVE & PROFE	K285S	Communications	Linear	800.00	Dollars
Factors	8	4 hrs document control x 2 revisions	50	dollars per hour	2	years		
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	K100S	Kaiser-Hill	Linear	1,941.92	Dollars
Factors	16	8 hrs to review & concur x 2 revisions	75	dollars per hour	2	years		

0.80913 [SYS 061400] .80704 - System

Line Item LF10202 - Nuclear Safety Procedures

BOE

Estimators Experience - This estimate is based upon similar work scope in FY00
Experience Item Desc - This item anticipates four revisions to the Site procedures/Safety plans which will include the preparation of guidance documents and/or implementation plans.

Breakdown of Cost Data:

Item - Safety Manual revisions
Units - Nuclear Engineer
Unit Cost - half FTE @ \$92.00 per hour (Tenera's FY00 rate for Professional Level 9)

Item - Safety Manual revisions
Units - Review and Concurrence from other organizations
Unit Cost - 8 hours per revision @ an estimated \$75 per hour

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A52	TENERA	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	170.200.00	Dollars
Factors	925	hours (half FTE)	92	dollars per hour	2	years		
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	K100S	Kaiser-Hill	Linear	1,941.92	Dollars
Factors	16	8 hrs per revision x 4 revisions	75	average rate per hour	2	procedures/revisions		

0.80913 [SYS 061400] .80704 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	21.893.71	Dollars
Factors	21893.7	Dollars						
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	11.701.05	Dollars
Factors	11701.1	Dollars						

Activity ID: 1HAF100030 Description: SARAH Maintenance & Development

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF10301	SARAH	1.00	each	EE	0	0	0	352.365	0	352.365	0	352.365
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	18.640	18.640	0	18.640
Total for Activity 1HAF100030:						0	0	352.365	18.640	371.005	0	371.005

Line Item LF10301 - SARAH

BOE

Estimators Experience - This estimate is based on the schedule plan of work to be completed by the project lead. FY99 and FY00 actual labor requirements were used to aid in the development of this estimate.

Experience Item Desc - Maintain and update the SARAH as closure progresses on site.

Breakdown of Cost Data:

WBS No: 1HAF10
Activity ID: 1HAF100030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter *

Starts In FY *

Item - Nuclear Safety Subcontracted support
Units - 1850 hours per year
Unit Cost - \$80 dollars per hour (estimated rate)

Item - Nuclear Safety Subcontracted support
Units - 1850 hours per year
Unit Cost - \$82 dollars per hour (\$82 per hour in FY00 for Tenera)

Item - Engineering support from Projects/Facilities
Units - 1000 hours per year
Unit Cost - 100 dollars per hour average rate

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A52	TENERA	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S Nuclear Safety & Licensing	Linear	151.700.00	Dollars
Factors	1850	hours	82	dollars per hour			
A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	K249S Nuclear Safety & Licensing	Linear	119.751.90	Dollars
Factors	1850	hours	80	dollars per hour			
0.80913 [SYS 061400] .80704 - System							
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	K100S Kaiser-Hill	Linear	80.913.42	Dollars
Factors	1000	hours of support from engineers	100	dollars per hour			
0.80913 [SYS 061400] .80704 - System							

Line Item SYS - Contingency And Escalation

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT No Department	Linear	11.230.73	Dollars
Factors	11230.7	Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT No Department	Linear	7.409.45	Dollars
Factors	7409.45	Dollars					

Activity ID: 1HAF100031 Description: SARAH Maintenance & Development FY02

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF10311	SARAH FY02-03	1.00	each	EE	0	0	0	238.163	0	238.163	0	238.163
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	35.505	35.505	0	35.505
Total for Activity 1HAF100031:						0	0	238.163	35.505	273.668	0	273.668

Line Item LF10311 - SARAH FY02-03

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A52	TENERA	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S Nuclear Safety & Licensing	Linear	157.250.00	Dollars
Factors	1850	hours (1 FTE)	85	dollars per hour			
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	K100S Kaiser-Hill	Linear	80.913.42	Dollars
Factors	1000	hours	100	dollars per hour			
0.80913 [SYS 061400] .80704 - System							

BOE

Estimators Experience - This estimate is based on 1 FTE (average) of support need to maintain and update the SARAH as closure progresses on site.
Experience Item Desc - SARAH upkeep
Breakdown of Cost Data:
Item - Subcontracted support
Units - 1850 hours per year
Unit Cost - 85 dollars per hour (\$82 per hour in FY00 for Tenera with excalation)

Item - Engineering support from Projects/Facilities
Units - 1000 hours per year
Unit Cost - 100 dollars per hour average rate

* The assumption is made that no additional work will be done on SARAH after FY02.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

WBS No: 1HAF10
Activity ID: 1HAF100031

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter *

Starts In FY *

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element		Skill		Department		Curve	Quantity	Units
CON		CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	24,375.28	Dollars
Factors 24375.3 Dollars										
ESC		ESCALATION		0000	NONE	ZDEPT	No Department	Linear	11,129.72	Dollars
Factors 11129.7 Dollars										

Activity ID: 1HAF100040 Description: Site AB Document Generation

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF10401	Site-wide Safety Evaluations and JCOs	1.00	each	EE	0	0	0	1,110,000	0	1,110,000	0	1,110,000
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	165,504	165,504	0	165,504
Total for Activity 1HAF100040:						0	0	1,110,000	165,504	1,275,504	0	1,275,504

Line Item LF10401 - Site-wide Safety Evaluations and JCOs

BOE

Estimators Experience - This estimate is based upon the experience of the Nuclear Safety Manager over the past 3 years. In general, the full NS staff (4 FTEs) have been kept consistently busy handling/commenting on the continual influx of safety evaluations.
Experience Item Desc - This item consists of Nuclear Safety's support to the project's ABs through the evaluation, correction, generation, and/or concurrence upon site-wide safety evaluations (SES, USQD) and JCOs. These documents (which are required for all site facilities) apply to multiple projects/facilities and may consist of discovery issues, or updates/changes to current AB documents.

Breakdown of Cost Data:
Item - Site-Wide Safety Evaluations/JCO Review
Units - 2 FTEs / Full time support
Unit Cost - approximately \$100 per hour (based upon KH's contractual rates with E2)

Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	A53	E-2	E080	NUCLEAR (CRITICALITY) ENGINEER		K249S	Nuclear Safety & Licensing	Linear	1,110,000.00	Dollars
	Factors	1850	hours (1850 per year)	100	dollars per hour	2	FTEs	3	years	

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element		Skill		Department		Curve	Quantity	Units
CON		CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	112,015.40	Dollars
Factors 112015 Dollars										
ESC		ESCALATION		0000	NONE	ZDEPT	No Department	Linear	53,488.53	Dollars
Factors 53488.5 Dollars										

Activity ID: 1HAF100060 Description: NS Assessments

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF10601	Technical Resolution of Emergent Issues	1.00	each	EE	0	0	0	547,521	0	547,521	0	547,521
LF10602	NS Assessments	1.00	each	EE	0	0	0	450,425	0	450,425	0	450,425
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	97,153	97,153	0	97,153
Total for Activity 1HAF100060:						0	0	997,946	97,153	1,095,099	0	1,095,099

Line Item LF10601 - Technical Resolution of Emergent Issues

BOE

Estimators Experience - This estimate is based upon prior year budget preparations and actuals. The work plan is based upon the Nuclear Safety & Licensing Manager's best guess based upon the current Closure Contract plan.
Experience Item Desc - This activity covers the requested or required assessments from the DNFSB through DOE/RFFO direction and other the resolution of other issues which may arise while the site is working with hazardous wastes.

Breakdown of Cost Data:
Item - Nuclear Safety and Safety Experts
Units - half-time support at Professional Levels 10
Unit Cost - 1 FTE @ \$99.35 per hour based upon the contract rate for FY01 with E2

Item - Nuclear Safety and Safety Experts
Units - half-time support at Professional Levels 10
Unit Cost - 1FTE @ \$97 per hour based upon current FY00 rates for Informatics

WBS No: 1HAF10
Activity ID: 1HAF100060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter *

Starts In FY *

Item - Nuclear Safety and Safety Experts
Units - half-time support at Professional Levels 8
Unit Cost - 1 FTE @ \$81.12 per hour based upon the contract rate for FY01 with SMI

Item - Technical Expert
Units - 150 hours per issue (expect 3 issues per year) + travel
Unit Cost - 125 per hour hours plus travel expenses

Item - Travel for Technical Expert
Units - 3 trips per year
Unit Cost - approximately \$1,250 per trip (estimate taken from actual travel cost of \$1,267.75 for one week trip of Beckman & Associates in FY00)

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A53	E-2	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	183.797.50	Dollars
Factors	925	hours (1850 per FY)	99.35	dollars per hour (E2)	2	years		
A5H	SUBCONTRACTED SRVS	0000	NONE	K249S	Nuclear Safety & Licensing	Linear	6.068.51	Dollars
Factors	1250	travel expenses	3	incidents	2	years		
0.80913 [SYS 061400] .80704 - System								
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	145.199.10	Dollars
Factors	925	hours	97	dollars per hour (Informatics)	2	years		
0.80913 [SYS 061400] .80704 - System								
A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	K249S	Nuclear Safety & Licensing	Linear	121.428.40	Dollars
Factors	925	hours	81.12	dollars per hour (SMI)	2	years		
0.80913 [SYS 061400] .80704 - System								
A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	K249S	Nuclear Safety & Licensing	Linear	91.027.60	Dollars
Factors	150	hours per issue	125	average rate for experts	3	incidents	2	years
0.80913 [SYS 061400] .80704 - System								

Line Item LF10602 - NS Assessments

BOE

Estimators Experience - This estimate is based upon prior year budget preparations and actuals. The work plan is based upon the Nuclear Safety & Licensing Manager's best guess based upon the current Closure Contract plan.

Experience Item Desc - This line item addresses the performance of surveillances, assessments, and observations of the implementation of the NSM and the Safety Manual, and AB authorizations. These reviews encompass both formal and informal evaluations of compliance and the maintenance of safe working conditions as the site develops into a closure state.

Breakdown of Cost Data:

Item - Nuclear Safety and Safety Experts
Units - half-time support at Professional Levels 10
Unit Cost - 1 FTE @ \$99.35 per hour based upon the contract rate for FY01 with E2

Item - Nuclear Safety and Safety Experts
Units - half-time support at Professional Levels 10
Unit Cost - 1FTE @ \$97 per hour based upon current FY00 rates for Informatics

Item - Nuclear Safety and Safety Experts
Units - half-time support at Professional Levels 8
Unit Cost - 1 FTE @ \$81.12 per hour based upon the contract rate for FY01 with SMI

It is assumed that any further assessment support will be supplied by George Miller's QA group. Accordingly this effort is not baselined in subsequent years.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A53	E-2	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	183.797.50	Dollars
Factors	925	hours	99.35	dollars per hour	2	years		
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	145.199.10	Dollars
Factors	925	half time support for 2 years	97	dollars per hour	2	years		
0.80913 [SYS 061400] .80704 - System								

WBS No: 1HAF10
Activity ID: 1HAF100060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter *

A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	K249S	Nuclear Safety & Licensing	Linear	121.428.40	Dollars
Factors	925 hours	81.12	dollars per hour	2	years			

0.80913 [SYS 061400] .80704 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	63.314.30	Dollars

Factors 63314.3 Dollars

ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	33.838.21	Dollars
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Factors 33838.2 Dollars

Activity ID: 1HAF100061

Description: Nuclear Safety Emergent Issues

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF10611	Technical Resolution of Emergent Issues	1.00	each	EE	0	0	0	16.142	0	16.142	0	16.142
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	4.464	4.464	0	4.464
Total for Activity 1HAF100061:						0	0	16.142	4.464	20.606	0	20.606

Line Item LF10611 - Technical Resolution of Emergent Issues

BOE

Estimators Experience - This estimate is based upon prior year budget preparations and actuals. The work plan is based upon the Nuclear Safety & Licensing Manager's best guess based upon the current Closure Contract plan for the need of resources for emergent critical issues through-out a fiscal year.
Experience Item Desc - This activity covers the requested or required assessments from the DNFSB through DOE/RFFO direction and other the resolution of other issues which may arise while the site is working with hazardous wastes.
Breakdown of Cost Data:
Item - Technical Expert
Units - 100 hours per issue
Unit Cost - \$187 per hour plus travel

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5H SUBCONTRACTED SRVS	0000 NONE	K249S Nuclear Safety & Licensing	Linear	1.011.42	Dollars

Factors 1250 travel expenses

0.80913 [SYS 061400] .80704 - System

A5H SUBCONTRACTED SRVS	E120 SAFETY ENGINEERS	K249S Nuclear Safety & Licensing	Linear	15.130.81	Dollars
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Factors 100 hours 187 rate for expert (Sciencetech)

0.80913 [SYS 061400] .80704 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	3.226.31	Dollars

Factors 3226.31 Dollars

ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	1.237.87	Dollars
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Factors 1237.87 Dollars

Activity ID: 1HAF100062

Description: Nuclear Safety Emergent Issues

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF10621	Technical Resolution of Emergent Issues	1.00	each	EE	0	0	0	191.309	0	191.309	0	191.309
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	27.264	27.264	0	27.264
Total for Activity 1HAF100062:						0	0	191.309	27.264	218.574	0	218.574

Line Item LF10621 - Technical Resolution of Emergent Issues

BOE

Estimators Experience - This estimate is based upon prior year budget preparations and actuals. The work plan is based upon the Nuclear Safety & Licensing Manager's best guess based upon the current Closure Contract plan for the need of resources for emergent critical issues through-out a fiscal year.
Experience Item Desc - This activity covers the requested or required assessments from the DNFSB through DOE/RFFO direction and other the resolution of other issues which may arise while the site is working with hazardous wastes.
Breakdown of Cost Data:

WBS No: 1HAF10
Activity ID: 1HAF100062

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter *

Starts In FY *

Item - Nuclear Safety and Safety Experts
Units - 80% of a Professional Level 10 subcontractor
Unit Cost - @ \$99.35 per hour based upon the contract rates with E2

Item - Technical Expert
Units - 120 hours for threeweeks of work (3 issues)
Unit Cost - \$100 per hour hours plus travel expenses (estimated rate)

Item - Travel for Technical Expert
Units - 1 two week trip per issue
Unit Cost - approximately \$2,350 (\$83 per night hotel x 11 nights = \$913; \$42 per day for perdiem x 12 days = \$504; \$513 airfare; \$120 parking; \$300 rental car)

* Assumes that NS expert support will be paid for by the facilities when appropriate (at least 20% of time)

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A53	E-2	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safetv & Licensing	Linear	156.476.30Dollars
Factors	1575	hours for 1 FY	99.35	dollars per hour			
A5H	SUBCONTRACTED SRVS	0000	NONE	K249S	Nuclear Safetv & Licensing	Linear	5.704.40Dollars
Factors	2350	travel expenses for expert assistance	3	trips			
A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	K249S	Nuclear Safetv & Licensing	Linear	29.128.83Dollars
Factors	120	hours for three weeks of work	100	\$ per hour average for experts	3	issues	
0.80913 [SYS 061400] .80704 - Svsstem							
0.80913 [SYS 061400] .80704 - Svsstem							

Line Item SYS - Contingency And Escalation

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	8.895.54Dollars
Factors	8895.54	Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	18.368.82Dollars
Factors	18368.8	Dollars					

Activity ID: 1HAF100AP2 Description: Nuclear & Criticality Safety Core Program

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF10A101	Nuclear Safety Program Administration	1.00	each	EE	1.458	1.458	52.109	293.047	0	345.156	25.429	370.585
LF10A102	Nuclear Safety Assessments	1.00	each	EE	0	0	0	176.226	0	176.226	0	176.226
LF10A103	Nuclear Safety Procedures	1.00	each	EE	0	0	0	138.437	0	138.437	0	138.437
LF10A104	SARAH Project	1.00	each	EE	0	0	0	211.813	0	211.813	0	211.813
LF10A107	Assess Site Licensing	1.00	each	EE	0	0	0	75.107	0	75.107	0	75.107
LF20A101	Criticality Safety Program Administration	1.00	each	EE	0	0	0	145.732	0	145.732	0	145.732
LF20A102	Criticality Safety Assessments	1.00	each	EE	0	0	0	134.369	0	134.369	0	134.369
LF20A103	Criticality Safety Procedures	1.00	each	EE	1.458	1.458	63.088	0	0	63.088	30.787	93.874
LF20A106	Compliance Assurance	1.00	each	EE	729	729	31.544	0	0	31.544	15.393	46.937
Total for Activity 1HAF100AP2:						3.645	146.740	1.174.731	0	1.321.472	71.609	1.393.081

Line Item LF10A101 - Nuclear Safety Program Administration

BOE	
Estimators Experience - Based upon the current required staffing and resources to handle the Nuclear Safety issues of FY00	
Experience Item Desc - This Line Item covers Nuclear Safety & Licensing Management, administration, and discovery issues (SES, USQD, JCO, AB changes)	
Breakdown of Cost Data:	
Item - Nuclear Safety & Licensing Management and staff	
Units - 2 FTEs (Manager and Secretary	
Unit Cost - 729 hours from June - September	
Item - Nuclear Safety Manager	
Units - 1 Subcontracted FTE	
Unit Cost - 729 hours from June - September x \$107.50 per hour (SMI rate)	

WBS No: 1HAF10
Activity ID: 1HAF100AP2

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1HAF
*

Starts In FY *

Item - Nuclear Safety Administrative Support
Units - 1 Subcontracted FTE
Unit Cost - 729 hours from June - September x \$33.90 per hour (Informatics rate)

Item - Nuclear Safety Engineer
Units - 1 Subcontracted FTE
Unit Cost - 729 hours from June - September x \$97 per hour (Informatics rate for Professional 10)

Item - Nuclear Safety Engineer
Units - 1 Subcontracted FTE
Unit Cost - 729 hours from June - September x \$78 per hour (SMI rate for Professional 8)

Item - Outside Technical Expert for Consultation with Nuclear Safety
Units - 225 hours
Unit Cost - \$187 per hour (Scientech rate)

Item - Nuclear Safety & Licensing Travel
Units - 14 trips approved from February - September
Unit Cost - (\$14,992 in travel expenses + \$9,150 in Fees) *.56

Item - Nuclear Safety & Licensing Supplies
Units - 21.5 FTEs supplies + office supplies
Unit Cost - (21.5 FTEs x \$250)*.5 of year + additional expenses

Itemized Additional Expenses: \$8,389
8 Memory Upgrades x \$130 = \$1,040 (required for NT upgrade)
2 Software Purchases x \$398 = \$796
1 Lot of Paper for 2 network printers = \$5,616
2 Toner/Developer for Fax Machine x \$100 = \$200
Recycle Boxes (1 lot = 50 boxes) = \$36
2 Toner/Developer for 5si Printer x \$178 = 356
3 Color Printer Toner x \$115 (\$70 for Black; \$45 for Color) = \$345

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	G040	SECRETARIES	K249S	Nuclear Safety & Licensing	Linear	729.00	Hours
Factors	729 hours							
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K249S	Nuclear Safety & Licensing	Linear	729.00	Hours
Factors	729 hours							
A5C	SUPPLIES	0000	NONE	K249S	Nuclear Safety & Licensing	Linear	7.377.00	Dollars
Factors	7377 office supplies and computer							
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	56.862.00	Dollars
Factors	729 hours		78 dollars per hour (SMI)					
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	70.713.00	Dollars
Factors	729 hours		97 dollars per hour (Informatics)					
A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	K249S	Nuclear Safety & Licensing	Linear	42.075.00	Dollars
Factors	225 hours		187 dollars per hour (Scientech)					
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	K249S	Nuclear Safety & Licensing	Linear	24.713.10	Dollars
Factors	729 hours		33.9 dollars per hour (Informatics)					
A5H	SUBCONTRACTED SRVS	M030	MANAGEMENT INTEGRATORS (GR	K249S	Nuclear Safety & Licensing	Linear	78.367.50	Dollars
Factors	729 hours		107.5 dollars per hour (SMI)					
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K249S	Nuclear Safety & Licensing	Linear	12.939.00	Dollars
Factors	12939 approved travel for NS. CS.							

Line Item LF10A102 - Nuclear Safety Assessments

BOE

Estimators Experience - This estimate is based upon prior year budget preparations and actuals. The work plan is based upon the Nuclear Safety & Licensing Manager's best guess based upon the current Closure Contract plan.

Experience Item Desc - This line item addresses the performance of surveillances, assessments, and observations of the implementation of the NSM and the Safety Manual, and AB authorizations. These reveiws encompass both formal and informal evaluations of compliance and the maintenance of safe working conditions as the site develops into a closure state.

Breakdown of Cost Data:

WBS No: 1HAF10
Activity ID: 1HAF100AP2

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter *

Starts In FY *

Item - Nuclear Safety Engineers
Units - 2 FTEs
Unit Cost - 729 hours (June - September) x \$97.9 per hour (E2 rates 96.46 thru June 30 and 99.35 from July 1 - September)

Item - Nuclear Safety Engineer
Units - 1/2 FTE
Unit Cost - 364 hours (June - - September) x \$92 per hour (Tenera rate)

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A53	E-2	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	142,738.20	Dollars
Factors	729	hours	97.9	dollars per hour (E2)	2	FTEs		
A53	E-2	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	33,488.00	Dollars
Factors	364	hours	92	dollars per hour (Tenera)				

Line Item LF10A103 - Nuclear Safety Procedures

BOE

Estimators Experience - This estimate is based upon similar work scope in FY00
Experience Item Desc - This line item maintains and revises the Nuclear Safety Program Manual and implementing procedures
Breakdown of Cost Data:
Item - Nuclear Safety Engineers
Units - 1 Subcontracted FTE
Unit Cost - 729 hours (June - September) x \$97.9 per hour (E2 rates 96.46 thru June 30 and 99.35 from July 1 - September)

Item - Nuclear Safety Engineer
Units - 1/2 Subcontracted FTE
Unit Cost - 729 hours (June - September) x \$92 per hour (Tenera rate)

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A52	TENERA	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	67,068.00	Dollars
Factors	729	hours	92	dollars per hour (Tenera)				
A53	E-2	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	71,369.10	Dollars
Factors	729	hours	97.9	dollars per hour (E2)				

Line Item LF10A104 - SARAH Project

BOE

Experience Item Desc - This line item covers the updating and revising the Safety Analysis and Risk Assessment Handbook which covers accident analysis methodology.
Breakdown of Cost Data:
Item - Updates of: T31, Standardize Drum Criticality Accident; TC, Facility Review of Priority 2 Tasks; T29, Examine/Revise Dry Metal Criticality Shutdown Mechanism; T01, Standardize Consequence & Frequency w/o Prevention; T02, Revise Frequency Bin Designation Table to DOE 3011; T12, Standardize Control Set Selection Criteria Processes; TD, Facilities Review of Priority 3 Tasks; etc.
Units - 1 Subcontracted Nuclear Safety Engineer
Unit Cost - 1360 hours (February - September) x \$82 per hour (Tenera rate)

Units - 1 Subcontracted Safety Expert
Unit Cost - 729 hours x \$65 per hour (RMRS Corp.)

Units - 1,150 hours of Project Engineers Support for Writing & Review
Unit Cost - \$91 (average site rate for subcontracted experts)

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A52	TENERA	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	59,778.00	Dollars
Factors	729	hours (June - September)	82	dollars per hour (Tenera)				
A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	K249S	Nuclear Safety & Licensing	Linear	47,385.00	Dollars
Factors	729	hours	65	dollars per hour (RMRS Corp)				
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	K249S	Nuclear Safety & Licensing	Linear	104,650.00	Dollars
Factors	1150	hours from Miscellaneous Project	91	average dollars per hour				

Line Item LF10A107 - Assess Site Licensing

BOE

Estimators Experience - This estimate is based upon a vendor quote (Merit Consultants) and experience of actual subcontractor costs in early FY00.
Experience Item Desc - External consultant to assess and provide an evaluation of the Site licensing strategy progress and organization, and to assist in the development and implementation of a D&D licensing strategy.
Breakdown of Cost Data:
Item - Professional Subcontracted Services
Units - 1,000 hours

WBS No: 1HAF10
Activity ID: 1HAF100AP2

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter * Starts In FY *

Unit Cost - \$120 per hours (Merit Consultantings Rate)

Item - Travel expenses of Subcontracted Professional
Units - monthly travel to Denver Colorado

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	K249S	Nuclear Safety & Licensing	Linear	9.106.82	Dollars
Factors 16992 dollars for travel expenses paid to 0.53595 --- FY00 May Earned Value Factor								
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	K249S	Nuclear Safety & Licensing	Linear	66.000.00	Dollars
Factors 550 hours 120 dollars per hour (Merit)								

Line Item LF20A101 - Criticality Safety Program Administration

BOE

Estimators Experience - Based upon the current required staffing and resources to handle the Criticality Safety issues of FY00.
Experience Item Desc - This Line Item covers Criticality Safety administration and training expenses of the criticality safety staff.
Breakdown of Cost Data:
Item - Criticality Safety Manager
Units - 1 Subcontracted FTE
Unit Cost - 729 hours (June - September) x \$124 per hour (WSMS current rate)

Item - Criticality Safety Administrative Assistant
Units - 1 Subcontracted FTE
Unit Cost - 729 hours (June - September) x \$46.50 per hour (SMI current rate)

Item - Training of Criticality Safety Engineers
Units - 20 Classes (1 per engineer)
Unit Cost - approximately \$2,000 per class

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	K249S	Nuclear Safety & Licensing	Linear	21.437.91	Dollars
Factors 2000 dollars per class 20 classes 0.53595 --- FY00 May Earned Value Factor								
A5H	SUBCONTRACTED SRVS	M030	MANAGEMENT INTEGRATORS (GR	K249S	Nuclear Safety & Licensing	Linear	90.396.00	Dollars
Factors 729 hours 124 dollars per hour (WSMS Mar)								
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	K249S	Nuclear Safety & Licensing	Linear	33.898.50	Dollars
Factors 729 hours 46.5 dollars per hour (SMI)								

Line Item LF20A102 - Criticality Safety Assessments

BOE

Estimators Experience - This estimate is based upon prior year budget preparations and actuals and is based upon the Nuclear Safety & Licensing Manager's best guess for the current Closure Contract plan.
Experience Item Desc - This line item addresses the performance of surveillances, assessments, and observations of the implementation of the NCSM. These reveiws encompass both formal and informal evaluations of compliance and the maintenance of safe working conditions as the site develops into a closure state.
Breakdown of Cost Data:
Item - Nuclear Safety Engineers
Units - 1 Subcontracted FTE
Unit Cost - 729 hours (June - September) x \$97.9 per hour (E2 rates 96.46 thru June 30 and 99.35 from July 1 - September)

Item - Support to JH-98
Units - Project estimated by Doug Harris, SSOC Criticality Safety Engineer
Unit Cost - 450 hours \$120 per hour (WSMS rate) = \$54,000 + \$9,000 for review and concurrence from project owners (approximately 90 hrs x \$100 per hour)

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A53	E-2	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	71.369.10	Dollars
Factors 729 hours 97.9 dollars per hour (E2)								
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	63.000.00	Dollars
Factors 63000 JH-98 Project								

Line Item LF20A103 - Criticality Safety Procedures

BOE

Estimators Experience - This estimate is based upon similar work scope in FY00
Experience Item Desc - This line item maintains and revises the Nuclear Criticality Safety Program Manual and implementation plan.
Breakdown of Cost Data:
Item - Nuclear Safety Engineers
Units - 2 FTEs @ 729 hours (June - September)
Unit Cost - labor rates

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
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WBS No: 1HAF10
Activity ID: 1HAF100AP2

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter *

750	STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	S100S	SSOC Salaried	Linear	729.00	Hours
<i>Factors</i> 729 Hours (SSOC support to K249S)								
750	STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	S100S	SSOC Salaried	Linear	729.00	Hours
<i>Factors</i> 729 hours (SSOC support to K249S)								

Line Item LF20A106 - Compliance Assurance

BOE	Estimators Experience - This estimate is based upon the current staffing of this activity/expertise. Experience Item Desc - This FTE's function is to directly focus upon compliance assurance issues. Assessment, reveiws, discoveries, etc. are utilized to facility this endeavor (example: current assessment is Criticality Safety Program Implementation of Transportation requirements). Breakdown of Cost Data: Item - Compliance Assurance Units - 1 FTE Unit Cost - 729 hours											
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	729.00	Hours
Factors 729 Hours									

Activity ID: 1HAF100BP2 Description: QA Support to ORCs

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF1B10	ORC/PRC Chair	1.00	each	EE	4.429	4.429	154.661	0	0	154.661	65.890	220.551
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	17.668	17.668	0	17.668
Total for Activity 1HAF100BP2:						4.429	154.661	0	17.668	172.329	65.890	238.219

Line Item LF1B10 - ORC/PRC Chair

BOE	Estimators Experience - Estimate based upon the full-time services of 1 KH FTE for ORC/PRC support Breakdown of Cost Data: Item - ORC Chairman Units - 1 FTE Unit Cost - 729 hours from June - September; 1,850 hours per year for FY01 - FY02* This assumes the ORC/PRC chair will be a rotating position funded through the facilities in FY03-FY05											
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	E120	SAFETY ENGINEERS	K249S	Nuclear Safety & Licensing	Linear	4.429.00	Hours
	Factors 4429 hours								

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	11.486.02	Dollars
	Factors 11486.0 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	6.182.42	Dollars
	Factors 6182.42 Dollars									

Activity ID: 1HAF100JP2 Description: Infrastructure Document Aliaiment

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF1J10	Aliaiment of Technical Work Control Docs	1.00	each	VQ	0	0	0	144.713	0	144.713	0	144.713
Total for Activity 1HAF100JP2:						0	0	144.713	0	144.713	0	144.713

Line Item LF1J10 - Alignment of Technical Work Control Docs

BOE	Vendor Name - Strategic Management Services, Inc. Vendor Quote - Approximately \$348,000 for the entire effort (beginning October 1999), \$283,620 from February through September 28th. Quote Received by - Wynn Harding Date Received - April 13, 1999 from Jeff Giangliuli, SMI (reconfirmed 4/17/00) Item being quoted - Infrastructure Document Alignment 1) Align SS&E policies and manuals with the 2006 Closure Plan and flowchart the work control process for closure. 2) Align all technical-supporting manuals into the process for closure 3) Produce a coomprehensive work control flow diagram 4) Apply a requirements-based approach to the streamlining SS&E documentation											
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WBS No: 1HAF10
Activity ID: 1HAF100JP2

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter *

Starts In FY *

5) Present/Brief Management on final 5'Bookshelf of guidelines
6) Train Personnel
Other Info -
Availability - February 1, 2000 through September 30, 2000

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	E120 SAFETY ENGINEERS	K249S Nuclear Safety & Licensing	Front Loaded	144.713.00	Dollars
	Factors 144713 Dollars					

Activity ID: 1HXXXF1011 Description: End of Nuclear Safety & Licensing Administration

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF1051	NS&L Program Administration	0.96	each	EE	1.850	1.785	95.413	89.119	0	184.532	33.204	217.736
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	184.331	184.331	0	184.331
Total for Activity 1HXXXF1011:						1.785	95.413	89.119	184.331	368.863	33.204	402.067

Line Item LF1051 - NS&L Program Administration

BOE

Estimators Experience - Prior year budget preparation, actuals and out-year organizational structures were utilized to develop this estimate. The work plan is based upon the Nuclear Safety & Licensing Manager's best guess based upon the current Closure Contract plan for the need of resources for emergent critical issues through-out a fiscal year.

Experience Item Desc - Nuclear Safety & Licensing program manager and office supplies. This activity also covers the requested or required assessments from the DNFSB through DOE/RFDO direction and resolution of other issues which may arise while the site is completing site closure.

Breakdown of Cost Data:
Item - Program Administration
Units - Program Manager and Secretarial Support
Unit Cost - 1,850 hours per FY per person

Item - Office supplies per person per P&I requirements
Units - 3.5 FTEs in FY05
Unit Cost - \$250 per person in Office Supplies

Item - Additional Supplies
Unit Cost - approximate cost \$1,535

Additional Supplies Itemized -
Memory Upgrade = \$130
2 Software Purchase x \$398 = \$796
25 Reams of Paper for the Fax Machine/Color Printer x \$10 = \$250
Toner/Developer for Fax Machine = \$100
4 lots of Recycle Boxes (1 lot = 50 boxes) x \$36 = \$144
Color Printer Toner x \$115 (\$70 for Black; \$45 for Color) = \$115

Item - Subcontracted Support for Database maintenance
Units - 925 hours for 1/2 FTE
Unit Cost - \$33.9 per hour (SMI rates)

Item - Nuclear Safety and Safety Experts*
Units - 1/3 of a Professional Level 10 subcontractor
Unit Cost - @ \$99.35 per hour based upon the contract rates with E2

* Assumes that NS expert support will be paid for by the facilities when appropriate (at least 20% of time)

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	K249S Nuclear Safety & Licensing	Linear	1.850.00	Hours
	Factors 1850 horus					
	A53 E-2	E080 NUCLEAR (CRITICALITY) ENGINEER	K249S Nuclear Safety & Licensing	Linear	64.577.50	Dollars
	Factors 650 hours 99.35 dollars per hour					
	A5C SUPPLIES	0000 NONE	K249S Nuclear Safety & Licensing	Linear	875.00	Dollars
	Factors 3.5 FTEs 250 Dollars per person for Suppies					

WBS No: 1HAF10
Activity ID: 1HXXXF1011

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1HAF
*

Starts In FY *

A5C	SUPPLIES	0000	NONE	K249S	Nuclear Safety & Licensing	Linear	1.535.00	Dollars
Factors	1535	Miscellaneous Supplies						
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	K249S	Nuclear Safety & Licensing	Linear	25.372.43	Dollars
Factors	925	hours for 1/2 FTE	33.9	dollars per hour for Database				

0.80913 [SYS 061400] .80704 - System

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	135.765.10	Dollars
	Factors 135765 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	48.566.02	Dollars
	Factors 48566.0 Dollars								

WBS No:	1HAF20	Title:	Criticality Safety	Cost Risk	3	Schedule Risk	1
Activity ID:	1HAF200010	Description:	Nuclear Criticality Safety Administration				

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF20101	Criticality Safety Program Administration	1.00	each	EE	0	0	0	371.231	0	371.231	0	371.231
LF20102	Criticality Safety Database Maintenance	1.00	each	EE	0	0	0	139.212	0	139.212	0	139.212
LF20103	Criticality Safety Engineers Training	1.00	each	EE	0	0	0	19.000	0	19.000	0	19.000
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	51.675	51.675	0	51.675
Total for Activity 1HAF200010:						0	0	529.442	51.675	581.117	0	581.117

Line Item LF20101 - Criticality Safety Program Administration

BOE

Estimators Experience - This estimate is based upon 1 Manager of the Criticality Safety program
Experience Item Desc - Criticality Safety Program Administration
Breakdown of Cost Data:
Item - Subcontracted support (WSMS)
Units - 1850 hours per year
Unit Cost - \$124 dollars per hour based upon current FY00 contracted rates
This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	M030	MANAGEMENT INTEGRATORS (GR	K249S	Nuclear Safetv & Licensing	Linear	371.230.80	Dollars
	Factors	1850	Hours	124	dollars per hour	2	years		

0.80913 [SYS 061400] .80704 - System

Line Item LF20102 - Criticality Safety Database Maintenance

BOE

Estimators Experience - This estimate is based upon 1 database administrator for the Criticality Safety database
Experience Item Desc - Criticality Safety Program Administration
Breakdown of Cost Data:
Item - Subcontracted support (SMI)
Units - 1850 hours per year
Unit Cost - \$46.5 dollars per hour based upon current FY00 contracted rates
This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS		P170	OTHER ADMINISTRATIVE & PROFE	K249S	Nuclear Safety & Licensing	Linear	139.211.60	Dollars
	Factors	1850	hours	46.5	dollars per hour	2	years			

0.80913 [SYS 061400] .80704 - System

Line Item LF20103 - Criticality Safety Engineers Training

BOE

Estimators Experience - This estimate is based the requirement for continued training of all certified criticality safety engineers. This estimate assumes half the engineers will attend one course every other year.
Experience Item Desc - Criticality Safety Program Training
Breakdown of Cost Data:
Item - Courses/Travel costs
Units - 10 courses (there are 20 CS engineers)
Unit Cost - 1,900 per course (\$900 in fees and \$1,000 in travel expenses)

WBS No: 1HAF20
Activity ID: 1HAF200010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter *

Starts In FY *

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A5M	TRAVEL/TRAIN/RELOCAT	0000 NONE	K249S Nuclear Safety & Licensing	Linear	19.000.00	Dollars
Factors	1900	dollars per training course	10	courses		

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	33.722.9	Dollars
Factors	33722.9	Dollars				
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	17.952.25	Dollars
Factors	17952.3	Dollars				

Activity ID: 1HAF200011 Description: Nuclear Criticality Safety Administration FY03

Cost Risk 3 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF20111	Criticality Safety Program Administration	1.00	each	EE	0	0	0	142.654	0	142.654	0	142.654
LF20113	Criticality Safety Engineers Training	1.00	each	EE	0	0	0	5.700	0	5.700	0	5.700
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	41.131	41.131	0	41.131
Total for Activity 1HAF200011:						0	0	148.354	41.131	189.485	0	189.485

Line Item LF20111 - Criticality Safety Program Administration

BOE

Estimators Experience - This estimate is based upon 1 Manager of the Criticality Safety program
Experience Item Desc - Criticality Safety Program Administration
Breakdown of Cost Data:
Item - Subcontracted support (WSMS)
Units - 1850 hours per year
Unit Cost - \$98 dollars per hour - assume a more low rate is attained through re- competition

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	M030 MANAGEMENT INTEGRATORS (GR	K249S Nuclear Safety & Licensing	Linear	142.654.40	Dollars
Factors	1850	hours	95.3	dollars per hour		

0.80913 [SYS 061400] .80704 - System

Line Item LF20113 - Criticality Safety Engineers Training

BOE

Estimators Experience - This estimate is based the requirement for continued training of all certified criticality safety engineers. This estimate assumes half the engineers will attend one course every other year.
Experience Item Desc - Criticality Safety Program Training
Breakdown of Cost Data:
Item - Courses/Travel costs
Units - 3 courses (there are 20 CS engineers)
Unit Cost - 1,900 per course (\$900 in fees and \$1,000 in travel expenses)

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A5M	TRAVEL/TRAIN/RELOCAT	0000 NONE	K249S Nuclear Safety & Licensing	Linear	5.700.00	Dollars
Factors	1900	dollars per course	3	courses		

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	29.754.18	Dollars
Factors	29754.2	Dollars				
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	11.376.60	Dollars
Factors	11376.6	Dollars				

Activity ID: 1HAF200012 Description: Nuclear Criticality Safety Administration FY04

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF20121	CS Program Manager	1.00	each	EE	1.850	1.850	78.829	3.800	0	82.629	22.230	104.858

WBS No: 1HAF20
Activity ID: 1HAF200012

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter * Starts In FY *

SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	14.944	14.944	0	14.944
Total for Activity 1HAF200012:						1.850	78.829	3.800	14.944	97.572	22.230	119.802

Line Item LF20121 - CS Program Manager

BOE	Estimators Experience - This estimate is based upon having a Manager of the Criticality Safety program and providing required criticality safety engineer training. Experience Item Desc - Criticality Safety Program Administration Breakdown of Cost Data: Item - Organization Manager/Lead Units - 1850 hours per year Unit Cost - Labor Rates Item - Courses/Travel costs Units - 2 courses (there are 20 CS engineers) Unit Cost - 1,900 per course (\$900 in fees and \$1,000 in travel expenses)											
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Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		M030	MANAGEMENT INTEGRATORS (GR	K249S	Nuclear Safety & Licensing	Linear	1.850.00	Hours
	Factors	1850 hours								
	A5M	TRAVEL/TRAIN/RELOCAT		0000	NONE	K249S	Nuclear Safety & Licensing	Linear	3.800.00	Dollars
	Factors	1900 dollars per course		2	courses					

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	4.875.71	Dollars
	Factors 4875.71 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	10.068.09	Dollars
	Factors 10068.1 Dollars									

Activity ID: 1HAF200020 Description: Maintain Criticality Safety Procedures

Cost Risk 3 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF20201	Nuclear Criticality Safety Manual	1.00	each	EE	3.700	3.700	160.099	0	0	160.099	66.419	226.518
LF20202	Ste Criticality Safety Analysis Documentation	1.00	each	EE	0	0	0	373.108	0	373.108	0	373.108
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	58.058	58.058	0	58.058
Total for Activity 1HAF200020:						3.700	160.099	373.108	58.058	591.265	66.419	657.684

Line Item LF20201 - Nuclear Criticality Safety Manual

BOE	Estimators Experience - This estimate is based upon the best guess of the Nuclear Safety & Licensing manager Experience Item Desc - This item is for the continual update and development of the site-wide Nuclear Criticality Safety Manual which covers the processing of all materials with the potential of criticality. Breakdown of Cost Data: Item - Labor support to process changes Units - 1850 hour per year Unit Cost - 2 years											
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Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		E080	NUCLEAR (CRITICALITY) ENGINEER	S100S	SSOC Salaried	Linear	3.700.00	Hours
	Factors	1850	hours	2	years					

Line Item LF20202 - Ste Criticality Safety Analysis Documentation

BOE	Estimators Experience - This estimate is based upon the experience of the Criticality Safety Manager relative to the number of changes to site AB documents, etc., which require CS review and concurrence Experience Item Desc - Review, update, and/or concurrence upon miscellaneous site-wide documents which require criticality safety review. Breakdown of Cost Data: Item - Subcontracted support (E2) Units - 1850 hours per year Unit Cost - \$99.35 per hour in FY01; \$102.33 per hour in FY02 (current E2 contracted rates) = average \$100.84											
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Resources															
	Cost Element			Skill			Department			Curve		Quantity	Units		
	A53	E-2		E120	SAFETY ENGINEERS		K249S	Nuclear Safety & Licensing		Linear		373.108.00	Dollars		
Factors	1850	hours		100.84	dollars per hour		2	years							

WBS No: 1HAF20
Activity ID: 1HAF200020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter *

Starts In FY *

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	37.853.27	Dollars
	Factors 37853.3 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	20.204.47	Dollars
	Factors 20204.5 Dollars								

Activity ID: 1HAF200021 Description: Maintain Criticality Safety Procedures FY03

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF20211	Nuclear Criticality Safety Manual	1.00	each	EE	1.210	1.210	52.357	0	0	52.357	18.115	70.472
LF20212	Ste Criticality Safety Analysis Documentation	1.00	each	EE	1.850	1.850	80.050	0	0	80.050	27.697	107.747
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	49.287	49.287	0	49.287
Total for Activity 1HAF200021:						3.060	132.406	0	49.287	181.693	45.813	227.506

Line Item LF20211 - Nuclear Criticality Safety Manual

BOE

Estimators Experience - This estimate is based upon the best guess of the Nuclear Safety & Licensing manager
Experience Item Desc - This item is for the continual update and development of the site-wide Nuclear Criticality Safety Manual which covers the processing of all materials with the potential of criticality.
Breakdown of Cost Data:
Item - Labor support to process changes
Units - 1210 hours
Unit Cost - Labor Rates

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	S100S	SSOC Salaried	Linear	1.210.00	Hours
	Factors 1210 hours								

Line Item LF20212 - Ste Criticality Safety Analysis Documentation

BOE

Estimators Experience - This estimate is based upon the experience of the Criticality Safety Manager relative to the number of changes to site AB documents, etc., which require CS review and concurrence
Experience Item Desc - Review, update, and/or concurrence upon miscellaneous site-wide documents which require criticality safety review.
Breakdown of Cost Data:
Item - Subcontracted support (SSOC)
Units - 1850 hours
Unit Cost - Labor rates

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	K249S	Nuclear Safety & Licensing	Linear	1.850.00	Hours
	Factors 1850 hours								

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	35,620.18	Dollars
	Factors 35620.2 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	13,666.75	Dollars
	Factors 13666.8 Dollars								

Activity ID: 1HAF200022 Description: Maintain Criticality Safety Procedures FY04

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF20221	Nuclear Criticality Safety Manual	1.00	each	EE	925	925	40.025	0	0	40.025	11.287	51.312
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	7.313	7.313	0	7.313
Total for Activity 1HAF200022:						925	40.025	0	7.313	47.337	11.287	58.624

Line Item LF20221 - Nuclear Criticality Safety Manual

BOE

Estimators Experience - This estimate is based upon the best guess of the Nuclear Safety & Licensing manager
Experience Item Desc - This item is for the continual update and development of the site-wide Nuclear Criticality Safety Manual which covers the processing of all materials with the potential of criticality.

WBS No: 1HAF20
Activity ID: 1HAF200022

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter * Starts In FY *

Breakdown of Cost Data:
Item - Labor support to process changes
Units - 925 hours for half-time support
Unit Cost - Labor Rates

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	S100S	SSOC Salaried	Linear	925.00	Hours
	Factors 925 hours								

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	2,385.90	Dollars
	Factors 2385.90 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	4,926.76	Dollars
	Factors 4926.76 Dollars								

Activity ID: 1HAF200050 Description: Criticality Safety Assessments

Cost Risk 3 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF20501	Technical Resolution of Emergent Issues	1.00	each	EE	3,700	3,700	160,099	0	0	160,099	66,419	226,518
LF20502	NCS Assessments	1.00	each	EE	3,700	3,700	160,099	0	0	160,099	66,419	226,518
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	43,283	43,283	0	43,283
Total for Activity 1HAF200050:						7,400	320,198	0	43,283	363,481	132,839	496,319

Line Item LF20501 - Technical Resolution of Emergent Issues

BOE

Estimators Experience - This estimate is based upon prior year budget preparations and actuals. The work plan is based upon the Nuclear Safety & Licensing Manager's best gues based upon the current Closure Contract plan.
Experience Item Desc - This activity covers the requested or required assessments from the DNFSB through DOE/RFFO direction and other the resolution of other issues which may arise while the site is working with hazardous wastes.
Breakdown of Cost Data:
Item - Nuclear Criticality Safety Experts
Units - 1 SSOC FTE
Unit Cost - half-time support @ 1,850 hours each per year

Resources	Cost Element			Skill		Department		Curve	Quantity	Units	
	750	STRAIGHT TIME BASE		E080	NUCLEAR (CRITICALITY) ENGINEER		S100S	SSOC Salaried	Linear	3,700.00	Hours
	Factors	1850	925 hours per year	2	years						

Line Item LF20502 - NCS Assessments

BOE

Estimators Experience - This estimate is based upon prior year budget preparations and actuals. The work plan is based upon the Nuclear Safety & Licensing Manager's best gues based upon the current Closure Contract plan.
Experience Item Desc - This activity covers the Criticality Safety assessments
Breakdown of Cost Data:
Item - Nuclear Criticality Safety Experts
Units - 1 SSOC FTE
Unit Cost - half-time support

It is assumed that any further assessment support (beyond FY02) will be supplied by George Miller's QA group. Accordingly this effort is not baselined in subsequent years.

Resources	Cost Element			Skill		Department		Curve	Quantity	Units	
	750	STRAIGHT TIME BASE		E080	NUCLEAR (CRITICALITY) ENGINEER		S100S	SSOC Salaried	Linear	3,700.00	Hours
	Factors	1850	925 hours per year	2	years						

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	28,176.23	Dollars
	Factors 28176.2 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	15,106.36	Dollars
	Factors 15106.4 Dollars								

WBS No: 1HAF20
Activity ID: 1HXXXAF200

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter * Starts In FY *

Activity ID: 1HXXXAF200 Description: End of Nuclear Criticality Safety Administration

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF20121	CS Program Manager	0.87	each	EE	1.850	1.616	68.846	3.319	0	72.165	23.958	96.123
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	51.290	51.290	0	51.290
Total for Activity 1HXXXAF200:						1.616	68.846	3.319	51.290	123.455	23.958	147.413

Line Item LF20121 - CS Program Manager

BOE	Estimators Experience - This estimate is based upon having a Manager of the Criticality Safety program and providing required criticality safety engineer training. Experience Item Desc - Criticality Safety Program Administration Breakdown of Cost Data: Item - Organization Manager/Lead Units - 1850 hours per year Unit Cost - Labor Rates Item - Courses/Travel costs Units - 2 courses (there are 20 CS engineers) Unit Cost - 1,900 per course (\$900 in fees and \$1,000 in travel expenses)											
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Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		M030	MANAGEMENT INTEGRATORS (GR	K249S	Nuclear Safetv & Licensing	Linear	1.850.00	Hours
	Factors 1850 hours									
	A5M	TRAVEL/TRAIN/RELOCAT		0000	NONE	K249S	Nuclear Safetv & Licensing	Linear	3.800.00	Dollars
	Factors 1900 dollars per course 2 courses									

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	36.399.22	Dollars	
	Factors 36399.2 Dollars									
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	14.890.94	Dollars	
	Factors 14890.9 Dollars									

Activity ID: 1HXXXAF222 Description: End of Maintain Criticality Safety Procedures

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF20221	Nuclear Criticality Safety Manual	0.87	each	EE	925	808	34.956	0	0	34.956	12.165	47.121
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	25.143	25.143	0	25.143
Total for Activity 1HXXXAF222:						808	34.956	0	25.143	60.099	12.165	72.264

Line Item LF20221 - Nuclear Criticality Safety Manual

BOE	Estimators Experience - This estimate is based upon the best guess of the Nuclear Safety & Licensing manager Experience Item Desc - This item is for the continual update and development of the site-wide Nuclear Criticality Safety Manual which covers the processing of all materials with the potential of criticality. Breakdown of Cost Data: Item - Labor support to process changes Units - 925 hours for half-time support Unit Cost - Labor Rates											
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	S100S	SSOC Salaried	Linear	925.00	Hours
	Factors 925 hours								

Line Item SYS - Contingency And Escalation

BOE									
Resources	<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	17.843.41	Dollars
	<i>Factors</i> 17843.4 Dollars								

WBS No: 1HAF20
Activity ID: 1HXXXAF222

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter *

Starts In FY *

ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	7,299.75	Dollars
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Factors 7299.75 Dollars

WBS No: 1HAF30	Title: DNFSB Activities & Req. Integration	Cost Risk 1	Schedule Risk 1
Activity ID: 1HAF3060P2	Description: Standards Management FY00-02		

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF30605	Directives Compliance Oversight	1.00	each	EE	4.429	4.429	116.173	0	0	116.173	49.493	165.666
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	13.272	13.272	0	13.272
Total for Activity 1HAF3060P2:						4.429	116.173	0	13.272	129.444	49.493	178.937

Line Item LF30605 - Directives Compliance Oversight

BOE	Estimators Experience - Standards Management has been performed in FY98, FY99 and FY00. This estimate is based upon the experience gained from actuals in those years Experience Item Desc - 1 full-time Subcontractor FTE who will track the applicability, and review the status of all DOE directives, notify Program Owners of the requirement and time limit to submit a Cost, Scope, and Schedule to RFFO, maintain a file of all applicable directives and necessary correspondence, establish the process and format all exemption and deviation requests, assist Program Owners with the submittals and track all correspondence and revisions until closure, interface with RFFO to address the status of directives that are to be incorporated into the K-H contract and review contract modifications, consult with Program Owners and K-H Contracts on discrepancies, and maintain the historical reference documents for all previous exemption, deviation and requests for approval processes. Breakdown of Cost Data: Item - Standards Management Support Units - 1 FTE Unit Cost - 729 in FY00 from June - September + 1,850 per year in FY01-02
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	K249S	Nuclear Safety & Licensing	Linear	4,429.00	Hours

Factors 4429 hours from June 2000 thru Sept 2003

Line Item SYS - Contingency And Escalation

BOE										
Resources	<i>Cost Element</i>			<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	8,627.67	Dollars

Factors 8627.68 Dollars

ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	4,643.89	Dollars
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Factors 4643.89 Dollars

Activity ID: 1HAF32002B	Description: DNFSB Updates & Status (FY04 & 05)
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Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF302B1	Prepare DNFSB Update	1.00	each	EE	3.700	3.700	157.657	0	0	157.657	49.651	207.308
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	69.109	69.109	0	69.109
Total for Activity 1HAF32002B:						3.700	157.657	0	69.109	226.766	49.651	276.417

Line Item LF302B1 - Prepare DNFSB Update

BOE	Estimators Experience - This estimate is based upon the past experience of the Regulatory Integration manager in FY99 and FY00 Experience Item Desc - POC for DNFSB commitments and assures that commitments are captured, and that accurate and timely information on commitments is entered into Major External Milestones and Commitments (MEMC) database and brought to closure. Breakdown of Cost Data: Item - Program Administration Units - Manager/Administrator Unit Cost - 1850 hours per year
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	M030	MANAGEMENT INTEGRATORS (GR	K249S	Nuclear Safety & Licensing	Linear	3,700.00	Hours

Factors 1850 Hours 2 years

Line Item SYS - Contingency And Escalation

BOE					
Resources	Cost Element	Skill	Department	Curve	Quantity Units

WBS No: 1HAF30
Activity ID: 1HAF32002B

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter *

CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	42,959.40	Dollars
Factors 42959.4 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	26,149.88	Dollars
Factors 26149.9 Dollars								

Activity ID: 1HAF3200P2 Description: DNFSB Activities & Regulatory Integration

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LF302A1	Prepare DNFSB Updates & Status	1.00	each	EE	3.140	3.140	133.774	45.999	0	179.773	53.801	233.574
LF302A2	Authorization Agreement	1.00	each	EE	3.140	3.140	133.774	45.900	0	179.674	53.801	233.475
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	51.483	51.483	0	51.483
Total for Activity 1HAF3200P2:						6.279	267.548	91.899	51.483	410.930	107.602	518.532

Line Item LF302A1 - Prepare DNFSB Updates & Status

BOE	Estimators Experience - This estimate is based upon the past experience of the Regulatory Integration manager in FY99 and FY00 Experience Item Desc - POC for DNFSB commitments and assures that commitments are captured, and that accurate and timely information on commitments is entered into Major External Milestones and Commitments (MEMC) database and brought to closure. Breakdown of Cost Data: Item - Program Administration Units - Manager Unit Cost - 364.5 hours (FY00 June - September) + 925 hours (half-time -- 1850 hours per year) Item - Program Administration Units - Consultant familiar with DNFSB intent Unit Cost - quarter time in FY00 & FY01 @ approximately \$99.35 per hour (E2 FY01 rate)											
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	M030	MANAGEMENT INTEGRATORS (GR	Linear	3.139.50	Hours
Factors 3139.5 Hours						
A53	E-2	E120	SAFETY ENGINEERS	Max Frontload	45.999.05	Dollars
Factors 463 hours for Executive Consultant 99.35 dollars per hour						

Line Item LF302A2 - Authorization Agreement

BOE	Estimators Experience - This estimate is based upon the past experience of the Regulatory Integration manager in FY99 and FY00 Experience Item Desc - POC for DNFSB commitments and assures that commitments are captured, and that accurate and timely information on commitments is entered into Major External Milestones and Commitments (MEMC) database and brought to closure. Breakdown of Cost Data: Item - Program Administration Units - Manager Unit Cost - 364.5 hours (FY00 June - September) + 925 hours (half-time -- 1850 hours per year) Item - Program Administration Units - Consultant familiar with DNFSB intent Unit Cost - quarter time per year @ approximately \$99.35 per hour (E2 FY01 rate)											
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	M030	MANAGEMENT INTEGRATORS (GR	Linear	3.139.50	Hours
Factors 3139.5 hours						
A53	E-2	E120	SAFETY ENGINEERS	Max Frontload	45.899.70	Dollars
Factors 462 support of Executive Consultant 99.35 dollars per hour						

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	34.515.07	Dollars
	Factors 34515.1 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	16.967.63	Dollars
	Factors 16967.6 Dollars								

Activity ID: 1HXXX3202B Description: End of DNFSB Updates & Status

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
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WBS No: 1HAF30
Activity ID: 1HXXX3202B

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAF
Activity Filter: *

LF302B1	Prepare DNFSB Update	0.48	each	EE	3.700	1.781	75.896	0	0	75.896	26.412	102.308
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	86.612	86.612	0	86.612
Total for Activity 1HXXX3202B:						1.781	75.896	0	86.612	162.508	26.412	188.920

Line Item LF302B1 - Prepare DNFSB Update

BOE
Estimators Experience - This estimate is based upon the past experience of the Regulatory Integration manager in FY99 and FY00
Experience Item Desc - POC for DNFSB commitments and assures that commitments are captured, and that accurate and timely information on commitments is entered into Major External Milestones and Commitments (MEMC) database and brought to closure.
Breakdown of Cost Data:
Item - Program Administration
Units - Manager/Administrator
Unit Cost - 1850 hours per year

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	M030	MANAGEMENT INTEGRATORS (GR		K249S	Nuclear Safety & Licensing		Linear	3.700.00
Factors		1850	Hours		2	years			

Line Item SYS - Contingency And Escalation

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE		ZDEPT	No Department		Linear	63.792.21
Factors		63792.2	Dollars						
ESC	ESCALATION	0000	NONE		ZDEPT	No Department		Linear	22.819.81
Factors		22819.8	Dollars						

Report Totals:

Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
60.207	2,443.926	6,510.271	1,438.025	10,392.221	936.330	11,328.551